

## ABSTRACT

An improved apparatus for receiving BS digital broadcast is disclosed. The apparatus for receiving BS digital broadcast of the present invention has first  
5 to third filters and a selective complex calculator circuit.

Each of the first to third filters 18 to 20 identifies the modulation technique applied to the received signal, by the modulation identification signals A0, A1 received from a timing generator circuit 25, and filters a phase error signal PED according to the identified modulation technique. The selective complex  
10 calculator circuit 21 shifts the phase of a signal point indicated by an I signal ADI1 and a Q signal ADQ1 absolute-phased by an absolute-phasing section 14, by a phase corresponding to the phase error signal filtered by the first to third filters 18 to 20. At this moment, the selective complex calculator circuit 21 selects the phase error signal corresponding to the modulation technique  
15 identified from the modulation identification signals A0, A1 received from the timing generator circuit 25. Consequently, in the burst receiving, it is possible to reduce the effect on the error rate because of the signal noise of the ODU to a degree equal to that in the continuous receiving.

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